June 24, 2006

To: Members of the Historical Commission

From: Charles M. Sullivan, Executive Director

Re: **Case D-1066: 38 Memorial Drive (E56, by Massachusetts Institute of Technology.** Raze former Warren Bros. – Cabot Corp. building, 1925-1951

A demolition permit application for the building at 38 Memorial Drive was received from the Massachusetts Institute of Technology on June 7, 2006. The applicant was notified of the initial determinations of significance, and a public hearing was scheduled for June 29.

Site

The Warren Bros. - Cabot Corp. building is located on the north side of Memorial Drive near the corner of Wadsworth Street in the vicinity of Kendall Square, between the Arthur D. Little (ADL) National Historic Landmark (E60) and the former headquarters of the Lever Bros. Co. (E60), facing the Charles River Basin National Register District.

The building is located on a parcel designated 47/74, which contain 35,312 square feet with 185 feet of frontage on Memorial Drive, but this is only one of several contiguous parcels totaling about 5.4 acres that are available for the development of M.I.T.'s Sloan School, the principal occupant of the site. The zoning is C-3B, which allows multi-family housing. The maximum allowable FAR is 3.0 and the maximum height is 120 feet, but the parcel is not efficiently usable without spreading a new structure over several adjacent lots.

M.I.T.'s plan is to raze the Warren Bros. - Cabot Corp. building and put up a new structure for the Sloan School that will link the ADL and Lever Brothers buildings and eventually extend back to Main Street.

Description

The Warren Bros. - Cabot Corp. building at 38 Memorial Drive was constructed in 1925 as the headquarters and laboratory of the Warren Brothers Company, an international engineering and road building enterprise. In 1951 the original exterior was removed or covered, and it became the research laboratory of the Godfrey L. Cabot Corp. In 1990, the Massachusetts Institute of Technology remodeled the building again for the Dibner Institute.

The original structure, which was designed by Harold Field Kellogg, had a three-story, reinforced concrete frame, floors and roof; the brick exterior had Neoclassical details expressed

in cast stone. The footprint measured 108' wide at the street and 69' deep. The first floor was placed above a half-basement and filled the footprint, while the second and third floors described an H-shaped plan. In the 1951 remodeling by E.T. Steffian and J.G. Kuhn the original structure was entirely reclad in red brick and glass curtain walls; a four-story stair tower was added to the southwest corner. In 1990 M.I.T. stuccoed over the brick, and at some point replaced the original windows with an aluminum system. There is currently no visible trace of the 1925 exterior; the 1951 redesign is apparent only in the building's massing and style of fenestration.

History and Significance

The history of this area is well documented in the Commission's *Report Three: Cambridgeport* of the Survey of Architectural History in Cambridge. Kendall Square proper was first developed as a commercial center around the West Boston Bridge, which was completed in 1793. Main Street, which was built on the causeway leading to Lafayette Square, marked the edge of buildable land until the late 1880s, when the Cambridge Improvement Company began to build a seawall from the West Boston (Longfellow) Bridge across the flats toward the mouth of the Charles at Captain's Island. As the flats were filled, the City of Cambridge took over construction of today's Memorial Drive, while the Improvement Company laid out streets for a proposed residential neighborhood to rival Boston's Back Bay. The Panic of 1893 made the residential lots unsellable, however, and in 1911 the Massachusetts Institute of Technology began to acquire a 43-acre parcel between Massachusetts Avenue and the nascent industrial section near Kendall Square.

M.I.T.'s new campus was largely completed by 1916, and it immediately began to attract corporate neighbors on prominent sites along the river. The first to appear was Arthur D. Little, the research firm, which built its headquarters and laboratory at 30 Memorial Drive in 1917. Warren Brothers followed in 1925, and in 1938 Lever Brothers moved its offices from the plant on Broadway to a new building at 50 Memorial Drive designed by Donald Des-Granges. The National Research Corp followed in 1946 with a building at 70 Memorial Drive, Cabot arrived in 1951, and in the 1960s the Electronics Corporation of America moved into the 1920-27 William Filene's Sons warehouse at 1-25 Memorial Drive.

In the early 20th century, Cambridge was the second most important industrial city in Massachusetts, and in the early 1920s was thought to have a potential for industrial development similar to that of Detroit. The firms that settled in the newly-filled tracts included some old Cambridge industries, like confectionery, but also included new ones, including metal fabricators, electrical apparatus manufacturers, shoe factories, and office machine manufacturers. Cambridge's industrial sector, which nurtured such firms as General Radio (Genrad), Raytheon, Polaroid, and the New England Confectionery, remained strong until after World War II. In the 1960s, M.I.T. began purchasing underutilized buildings in the Kendall Square area and along the river, and is now the dominant – if not the only – property owner south of Main Street.

The predecessor of the Warren Bros. Company was established in 1844 to exploit a patented roofing compound using coal tar, producing "Warren's Improved Fire and Water-proof Felt

and Cement Roofing;" asphalt was later substituted for coal tar. One member of the original firm, Cyrus Warren, studied organic chemistry at Harvard and Heidelberg and returned to found the Warren-Scharf Co. in 1884. Seven brothers of the second generation formed the Warren Bros. Company in 1900 to engage in asphalt paving for roads, built the first modern asphalt plant in the U.S. on the Broad Canal in East Cambridge, and laid one of their first pavements on Temple Street in Cambridge in 1901. The firm patented an improved asphalt pavement, Warrenite-Bitulithic, and began to manufacture paving plants and machinery. By the mid 1920s the firm had added an engineering division, and was constructing roads in 250 locations in the U.S. as well as in Cuba; affiliates were building roads in South America, Europe, and Australia.

The Cabot Corporation, which acquired the Warren Bros. headquarters and remodeled it for a research laboratory in 1951, was founded by Godfrey L. Cabot as a carbon black business in 1882. Although most production originally took place in Pennsylvania, Texas and Louisiana, the firm was headquartered in Boston and grew into an international company in the mid 20th century. Carbon black is a petroleum product originally used in pigments and for strengthening rubber products, but the research lab founded in Cambridge in 1951 helped find high-tech applications.

In 1990, M.I.T. remodeled the Warren Bros. - Cabot Corp. building for the Dibner Institute, an international center for advanced research in the history of science and technology. The institute closed to the public in 2005 and moved its collections to the Huntington Library in California.

The Warren Bros. - Cabot Corp. building is significant for its associations with 20th century industrial research and technology enterprises associated geographically, if not organizationally, with the Massachusetts Institute of Technology, and for its associations with Cambridge's diverse economic base in the 20th century.

Recommendations

The staff recommends that the Commission find the Warren Bros. - Cabot Corp. building significant, as defined in Article II of Chapter 2.78 of the City Code, for the reasons stated above.

M.I.T.'s proposal to demolish the Warren Bros. - Cabot Corp. building will allow the larger site to be used for an expansion of the Sloan School that will incorporate the two adjacent historic buildings, the Arthur D. Little National Historic Site and the Lever Brothers headquarters. The staff recommends that the Commission find the building not preferably preserved in the context of the proposed project.